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COUNTY AGENT VO-AG TEACHER

THE LEADING MAGAZINE FOR AGRICULTURAL LEADERS



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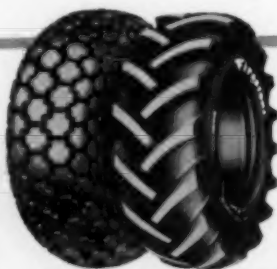
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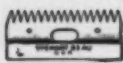
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COUNTY AGENT VO-AG TEACHER

AUGUST 1961

Vol. 17 No. 8

THE LEADING MAGAZINE FOR AGRICULTURAL LEADERS

FEATURES

8 Big Machines for Big Jobs by Lloyd Hurlbut and Dick Fleming

A flock of new and experimental tractors, as well as new farm equipment, was demonstrated at the 10th annual Tractor Power and Safety Day last month at the University of Nebraska. We asked one of their outstanding ag engineers to report on "what's new and what's coming."

10 See You in New York! Report about coming NACAA Annual Meeting

12 10 Ways to Improve Vocational Agriculture by D. R. Purkey

Too many contests and awards—and not enough time for on-farm instruction! That's one of the "complaints" this assistant vo-ag supervisor in Ohio registers about present vo-ag philosophy. He also tells how he'd like to teach Vo-Ag.

16 Try a Tractor Workshop by Robert Denker

What factors are essential for an adult tractor workshop that leaves farmers asking for MORE? The author has had the experience to give vo-ag teachers plenty of help here.

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COUNTY AGENT AND VO-AG TEACHER



"I can't see how we ever got along without this extension phone"

John Randles manages the Hull-Dobbs purebred Hereford farm in Fayette County, Tennessee. About 500 head of cattle on 1300 acres keep John and six hired men busy around the clock.

The daylight center of operations is the big cattle barn that lies back in the pasture a considerable distance from the house. John spends 10 to 12 hours a day in and around this building. And that's where the problem came in.

With ten or more important calls coming in on the house phone each day, John was like a base runner caught between second and third. Often Mrs. Randles had to come out to the barn to fetch him while a Long

Distance call waited on the line. Many of these calls involved thousands of dollars in cattle sales or coordinating show-circuit trips with the Hull-Dobbs headquarters farm in Mississippi.

So John reasoned that while a man can't be at two places at the same time—a telephone can. He had an extension phone installed in the barn with a loud bell attached that his wife can ring from the house.

Now John handles his calls from the barn—keeps himself and his men on the job. And, even when he's at the house, he can call his men—or they can call him.

John's extension is saving him an hour to two hours a day. Counting

the improved use of the time of his six men, the saving likely adds up to five or six hours a day. And no important calls need ever be missed or postponed.

"It used to take a man up to half a day to get in touch with me," John told us. "Now with this phone here in the barn, a half a minute is more like it. I can't see how we ever got along without this extension phone."

You don't have to save as much time as John Randles saves to afford an extension. Five or six minutes a day will do it. Why not check up and find out how much you can save? Then give your Bell Telephone Business Office a call. They'll be glad to help.

BELL TELEPHONE SYSTEM



ag leaders speak up

County agents discuss the "academic trap"

WHITHER NON-FARM AGENTS?

Your editorial in the May issue of COUNTY AGENT was good for the majority of county agents in the nation but now what are we going to do about change? Extension has been static for fifty years so look out for dramatic changes soon. We are going down two roads now 1) agricultural technology 2) general extension for society as a whole.

Change in the function of the county agent depends upon the experience of the agent and the changes that are going on both in agriculture and modern society.

I believe that we both agree that the inexperienced agent must first know subject matter cold in order to get and hold the confidence of the local people. However, subject matter per se should be left up to the subject matter specialist, just as I agree with you that economics and sociology should be left up to the economists and sociologists.

On the road of agricultural technology, with the bulk of the subject matter questions, I can answer for 90% of the growers in my county. However, the top 10% of my growers, the ones Extension will be working with in 10 or 20 years, ask questions as to how to market and promote their products too. For this reason, I think that progressive agents are changing from subject matter experts to marketing and promotion experts in specialized agriculture.

In the present Extension organization there is neither the specialized subject matter specialist nor the marketing specialist who is adapting recommendations to a local Extension level. For this reason, the function of the local agent must be to fill this gap for his particular growers. This I know the growers will buy. In fact, they will even pay for it handsomely, as indicated by the rise in executive secretaries working in producer or producer marketing groups or organizations.

Let's take a look at the road "general extension for society as a whole." What about the extension organization in counties where agriculture is on the way out? This is the case in many counties surrounding our metropolises, frequently called the urban sprawl. We can't blame these agents for jumping at straws, but they are putting the emphasis on ornamental work with home owners. I don't agree with this thinking as this function should be left to private enterprise, namely garden supply dealers, landscape contractors, nurserymen, florists, etc.

Instead, I think that the extension organization of the future will convert to continuing work with adults with more emphasis being placed on mass adult education work on public problems, even if it gets out of agriculture. Such work will be for and with local resources, as extension has always worked since its inception. It will be working with people and conserving natural resources such as land, water, etc. Public problems deal with all these things. In the past we dealt with food production. Now the problems deal with food, fibre and ornamentals and their distribution and the need for spiritual food found in parks, wholesome recreation and getting back to more outdoor living.

You have done a good job of reporting the feelings of the majority of present county agents. Can you do an equally fine job of predicting for the top 10 per cent of progressive agents where they will be ten or twenty years in the future?

ROBERT H. BREWSTER
Associate County Agent
Suffolk County Extension
Service Ass'n.
Riverhead, L. I., N. Y.

I think that county agents will be working more in marketing and distribution than they have in past—but the most successful will stay well grounded in subject matter.—EDITOR.

THE COUNTY AGENT'S JOB

I have read your editorial "Beware of Academic Trap" which appeared in the May issue of County Agent Vo-Ag Teacher.

In the main I agree with many things which you pointed out in this article. Apparently there is some misunderstanding of the role and duties of a county agent.

In 1914 when the Smith Lever Act was passed the law makers had two things in mind which could and have been accomplished by the Cooperative Extension Service with county agricultural agents in the counties.

1. The county agent was the local contact between the Land Grant College, United States Department of Agriculture, and the local people, to make available the results of research to help farmers to help themselves.

2. The second reason was that in 1914 our country was in World War No. 1 and food was a vital weapon. County agents were to help stimulate food production on farms to feed the armies.

The first image of the county agent was to teach the farmer to raise two blades of grass where only one grew before.

The first twenty years of County Extension work was largely confined to working with individual farmers and groups of farmers on production problems.

In 1935 county program planning groups were introduced and are still used to help people and also the county agent to recognize what were their problems and how to solve them. I feel, and know many will agree with me that this is a sound approach.

In recent years some critics say that county agents have done their job too well. County agents have caused an over production which has caused the farmer to be in an economic chaos. They state that county agents should turn our efforts to helping farmers do something in marketing and other fields to raise their net income.

We all agree that time brings changes. There is a tremendous increase in research in agricultural lines carried by private companies. Farm population has decreased from 25% of the nation's population to 8% of the nation's population. Thirty-two million of the nation's population are suburban residents and are increasing at a rate of 1,000,000 a year.

These rapid changes have caused peo-

(Continued to page 13)

COUNTY AGENT AND VO-AG TEACHER



ag leaders washington

Latest word from the Capitol—by John Harms and George Peter

Increased training for all kinds of agricultural services urged

A BREAKTHROUGH in the need to overcome the present definition of "farming" as it affects vo-ag teaching was seen as imminent at press time by new Health, Education and Welfare agency thinkers guiding the New Frontier approach to vocational education. They are pinning their hopes on President Kennedy's manpower training and retraining proposals.

For occupational training, development, and use of the manpower resources of the Nation, the proposals call for authorization of enough funds as "may be necessary." Earliest estimates call for a minimum of \$100 millions a year for five years, about \$30 millions of which would be spent for vocational education of ALL KINDS, no strings attached as to type of vocational education.

As HEW planners see it this early, the \$30 millions is enough to provide for vo-ag teaching as much again as the present annual limit of slightly over \$13 millions. The additional funds would bring the total available for vo-ag teaching to \$26 millions.

VO-AG TEACHING would be expanded to make possible training in all fields related to agriculture as HEW is now thinking. One major hope is to increase training for all kinds of agricultural services. Except as the limitations on the annual \$13 millions are concerned, vo-ag teaching could go beyond the present almost literal restriction to on-farm activities.

The Secretary of Labor would make the appraisal of the national needs of all kinds of manpower, but he would do so by calling on HEW and other agencies appropriate for the kind of training needed. For vocational agricultural training the Secretary of HEW would enter into agreements with State vocational educational agencies. The State agency would provide the training or retraining needed through contract.

Any agreement reached could call for payment to the State agency of up to 100 per cent of the cost to the State of carrying out the agreement where the trainee is unemployed and up to 50 per

cent of the cost for other trainees.

It may take some time yet before the Secretary of Labor can complete a report and recommendations. But as one source, with whom we discussed the possibilities, expressed it: "Time is what we need."

The White House advisory committee on vocational education, asked for in President Kennedy's message to Congress on education, has been named, but as we were preparing to go to press the announcement had been held up pending a routine check for "security." Several vo-ag member names had been offered, but our tip was that the final selectees could contain some surprises.

The new HEW is determined to get vocational training off dead center, as some of the New Frontiersmen view it. Secretary Ribicoff was famed as a champion of vocational education of all kinds in his home State, Massachusetts, when he was Governor.

This is what is behind some of the new impetus provided. We have learned that the new White House vocational education task force will work almost independently of present agencies, and that it is going to be almost a case of the agencies working with the task force than the reverse. The task force has been told to do a thorough job, and we have been reliably informed this may take another year.

ANOTHER BIG BOOST in opportunities for vo-ag teaching is being furnished by USDA. Secretary of Agriculture Freeman, testifying on the Administration's bill to create a Youth Conservation Corps, reported that the Forest Service alone had enough delayed projects to provide nearly 300,000 man-years of work.

The Youth Corps would need experienced trainers in conservation, development, and management in most of the natural resources activities that would be stepped-up. The trainees would be mostly young people between 16 and 20 in a three-year educational program.

The Administration's Youth Conservation Corps measure goes far beyond earlier proposals and also calls for on-the-job training and employment.

MOST EVERY FARMER enjoys a beauty pageant. But the "models" registering the most "ohs" and "ahs" generally aren't to be found at an Atlantic City or Miami Beach resort. A never-to-be forgotten experience for about 5,000 farmers and other farm tractor and machinery enthusiasts was the 10th annual Tractor Power Safety Day at the University of Nebraska on July 20.

They came from South Dakota, Iowa, Missouri, Kansas and

Nebraska to get a glimpse of the new tractor models and new pieces of farm equipment.

The event also marked the 50th anni-

versary of the famed Nebraska Department of Agricultural Engineering, home of the universally acclaimed Nebraska Tractor Tests.

BIG MACHINES FOR BIG JOBS

By LLOYD HURLBUT and DICK FLEMING



International's 4-wheel drive tractor, one of the world's largest, illustrates that maximum power of wheel-type tractors has doubled in past few years.

The new John Deere 8010 diesel tractor brings power, economy and utility to larger acreage operations. With more than 200 engine horsepower, it pulls giant-capacity equipment at speeds up to 7 mph. Ten tons of traction-producing weight and 4-wheel drive provides tremendous capacity. Front and rear units are free to rotate 16 degrees in either direction, making the new tractor a sure-footed performer on uneven ground. Rubber-tired mobility eliminates trucking costs.



This robot-controlled tractor is guided by an electrically charged wire and performs a series of functions in accordance with a pre-determined plan. The system was developed by Nebraska Ag. Engineer Pichon and Oliver Corp.



(This seems to be an ideal event for COUNTY AGENT & VO-AG TEACHER to feature as it does a little celebrating of its own—this is the 10th annual August Tractors & Equipment Issue!—EDITOR).

Ag leaders should take special note of these experimental tractors which made their initial debut at the Nebraska event:

- International tractor with a revolutionary turbine power unit coupled with hydrostatic drive;
- Ford hitch for tandem tractors;

Lloyd Hurlbut is agricultural engineer and Dick Fleming is assistant extension editor at the University of Nebraska.

- International 4300, a large 4-wheel drive tractor;
- John Deere 4-wheel drive tractor;
- International Cadet Junior garden tractor for suburban areas;

A parade of wheel-type tractors included:

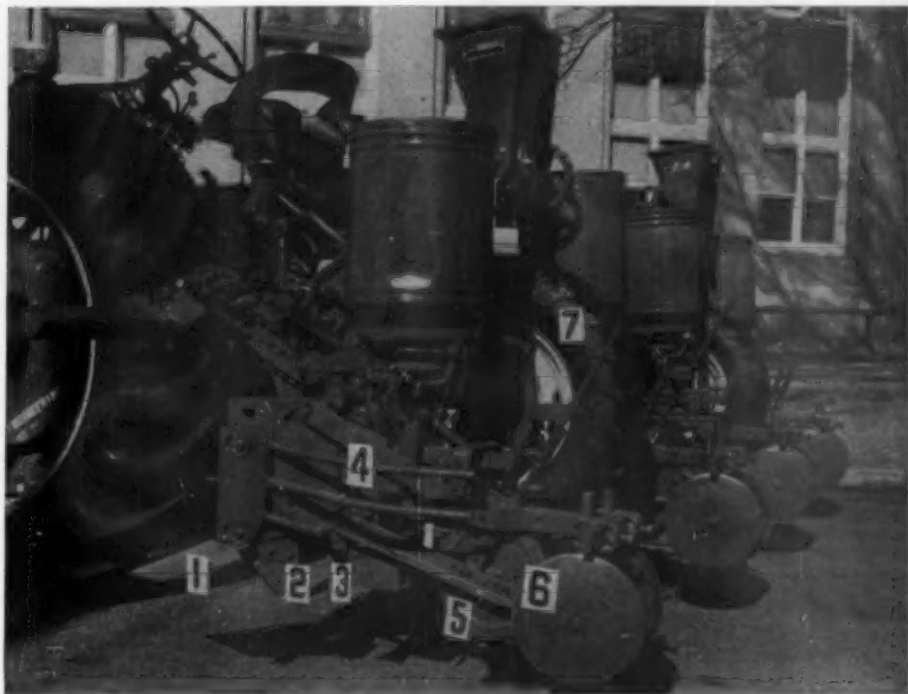
- Allis-Chalmers — D-15 gasoline; D-15 LPG, and D-15 diesel.
- J. I. Case—541-C (torque-converter) gas, 640C, 541, 640, 441, 841C, 741C, 741, 630, 531C, and 431.
- Ford—6,000 diesel.
- International—340 diesel.
- John Deere—4010, 3010, gasoline, diesel, LPG.
- Oliver radio-controlled tractor.
- Massey-Ferguson—88 diesel.

- Minneapolis-Moline—M-5, gasoline, diesel and LPG; GVI, diesel LPG and Four-Star, gasoline, diesel.

New pieces of farm equipment which were displayed include:

- Lundell Flair Harvester with hay conditioning attachment;
- Lundell Wafer King;
- John Deere 105 Combine with 20 foot cut;
- John Deere Harvester for Castor beans;
- New machines for till-planting various field crops;
- Automatic controls for mechanical feeding systems.
- Remote control unit for operating irrigation systems.

Nebraska Till-Plant Equipment shows the latest for till-planting row crops. Here is the key to the numbers: 1) Sixteen-inch sweep cuts and removes residue and weeds from the row; 2) Root cutter clears roots and opens soil for seed tube and stabilizes till-planter; 3) Seed tube places seed in location for best germination and stand; 4) Trash guards push residues to side of row, leave an area 10 inches wide free of weeds and residue; 5) One-inch by 10-inch press wheel presses seed firmly in undisturbed soil for rapid germination and uniform stand; 6) Covering disks place a cover of loose soil over the seed thus reducing surface crust and moisture loss around seed; 7) Gage wheel drives planting mechanism and sets the depth of tillage.



Paul Fischbuch, University of Nebraska extension agricultural engineer, holds radio transmitter and soil moisture measuring device used to start and stop an irrigation pump. An automatic control panel sends signals between the tensiometer and the pump.



The 10th annual Tractor Power and Safety Day attracted about 5,000 farm equipment enthusiasts. Lloyd Hurlbut was in charge.



SEE YOU IN NEW YORK!



ON THE SPOT marketing tours will take county agents to see marketing activities at New York City's Washington Street Produce Market, the flower Market, the Fulton Street Fish Market and the United Fruit Company during the 46th annual meeting of the NACAA, Sept. 10-14.

Agents will also have the unique opportunity to participate in tours of the Stock Exchanges, the Mercantile Exchange, the Cotton Exchange, the Federal Reserve Bank and many other places that help market products consumed by our nation.

←The meeting will be held at the Waldorf-Astoria.

Planned recreational tours include a sponsored evening boat trip around Manhattan Island complete with box supper and a sponsored United Nations tour. The women's program includes a sponsored morning brunch and Fashion Show at the Tavern on the Green in Central Park. In addition, arrangements will be provided for obtaining convention rate tickets for Rockefeller Center, C.B.S., the Empire State Building, radio and TV shows and other entertainment activities.

Dr. E. W. Janicke, Chairman, ECOP; Dr. E. T. York, Federal Extension Director; and Cornell's noted food economist, Herrell DeGraff; will spark the speaking program with their views on Extension's responsibility in marketing. Michigan State's Professor John Carew will moderate a panel on "New Horizons in Marketing" on Tuesday's program. "Marketing in Action for Youth," Pennsylvania's pilot marketing program, will be explained by Professors Robert Donaldson and P. Glenn Barr and their co-workers on Thursday.

Director Maurice Bond, of New York, will chair a Thursday afternoon panel on the topic, "New Challenges in Marketing for County Agents." Panelists will include Associate Director Marvin Anderson of Iowa and Dean T. K. Cowden, College of Agriculture, Michigan State University.

The Distinguished Service Award Banquet on Thursday evening will conclude the Annual Meeting Program.

For your convenience, COUNTY AGENT & VO-AG TEACHER has provided you with a reservation card (top of this page). Send it in today!

COUNTY AGENT AND VO-AG TEACHER

Remarkable Phosdrin® Insecticide lets growers control destructive insects on many crops up to 24 hours from harvest

Phosdrin is an outstanding new phosphate insecticide that knocks down and kills the toughest insects fast—then disappears without leaving any residue.

Here is how Phosdrin works. And how you can get the latest technical information.

IT is well known that a late season insect build-up can quickly make fruit, vegetable and forage crops unsalable. If the infestation is controlled with an insecticide that leaves excessive residue on the crop at harvest, it still is unsalable.

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Phosdrin kills insects (including resistant strains) within a few minutes of application. However, unlike most other insecticides, Phosdrin disappears rapidly after it has done its job, leaves no residue. That is why Phosdrin can be applied up to 24 hours from harvest on many crops.

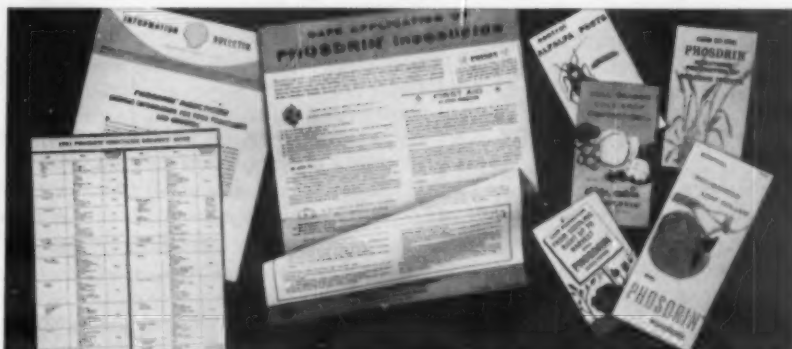
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Crop leaflets—These leaflets contain specific information for growers of veg-



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etables, cole crops, deciduous fruit, alfalfa, and sorghum. See the coupon below.

Bulletin for Food Processors and Growers—An Information Bulletin containing application intervals, dosages, safety precautions, compatibility with other pesticides, and other application information.

To obtain any of this material, simply fill out the coupon below and send

it to Shell Chemical Company, Agricultural Chemicals Division, Dept. 4367, 50 West 50th Street, New York 20, N. Y.



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A former vo-ag teacher says that too much time is spent on contests and awards—not enough on on-farm training.

ten ways to up-date

By D. R. PURKEY

IF I were a vo-ag teacher again I would make some changes. After teaching for fifteen years and being an assistant state supervisor and executive secretary-treasurer of the FFA—as well as being a parent of a vo-ag student and state FFA officer—things look a little different.

Many of the changes coming, I believe, are a result of a change in our agricultural situation, as well as a different point of view. These opinions are entirely my own (with some help and suggestions) and are not necessarily a point of view of Ohio's program projection.

It will probably be impossible for any teacher to follow the suggestions of all ten of the following. Teachers may find it impossible to abide by several, due to "community pressure" or local situations that might not be understood by the public. We realize that, in many cases, the state program will need to be altered in order to allow teachers to abide by several of the points listed.

1) **Eliminate "judging contests"** and practice judging that is connected with highly competitive team participation. With the changes in agriculture which tend to emphasize specialization, some judging contests, such as dairy, general livestock, meat, etc., have passed their stage of usefulness.

It has also been found with many types of livestock the degree of correlation between types and production is so low it does not warrant the time to "train the team." In the process of eliminating judging contests, it seems apparent that there should be changes to enterprise contests which would enlist participation by Future Farmers who are particularly interested in a specified enterprise.

This would allow a certain degree of

specialization by boys who may find some use for parts of the program. However, in my opinion, it is a matter of time until judging contests will be in the same category as oiling harness and making double-trees.

2) **Limit activities** at local, county, and state fairs to "public relations." For a number of years it appears many fairs have been conducted as a means of "education." For a very few boys (in my opinion, less than a tenth of one per cent) this may be true. However, considerable time and effort is expended by educational agencies to promote these exhibits. It may be necessary to keep the public informed of the activities of the department, but better ways have already been developed to do this job. In reviewing a number of local and county fairs, it was learned that the audience interest in the barns and stables has declined considerably. In many cases, so-called educational exhibits are "tied in the corner" and very few people have an opportunity to observe them. Exhibits depicting the program and objectives of vocational agriculture could be developed in limited numbers.

3) **Eliminate about one-half of the FFA contests and awards.** Through a study of teacher time, we find that many hours of hard work need to be spent by the teacher in completing State Farmer applications, Star Farmer awards, Farm Mechanics awards, Farm Safety awards, etc.

We have come to the point where it is necessary to give an award in "every enterprise for everything."

While attending a recent local FFA Parent-Son banquet, I was informed by

one of the parents, prior to the banquet, that every boy would receive some kind of a medal or recognition before the program was completed. Although a careful check was not taken, I believe he was correct. The program consisted of a continuous stream of boys going to the stage to receive a medal, a check, a letter, or some form of recognition. Awards are important and necessary, but when carried to extreme, they lose their value.

4) **Simplify the Farming Program record-keeping activities** so that its use would be restricted to that part which can be applied to farm accounting. To expect the average high school boy to keep accurate enough records for "teaching material" is a fallacy in my opinion. Many boys can do it; the majority can not.

At the present time, farm accounts and a system of farm accounting is one of the most important phases of our educational program. If project record keeping is not correlated with a high carry-over value, much of our effort goes down the drain.

I would much rather see a boy with experience in the entire farm operation than a single enterprise.

5) **"Go for quality"** if enrollment becomes "high" (45 or over) by eliminating the freshman class, and dividing the junior-senior class. This, of course, is second best to securing an additional teacher.

We can not assume that the best year of vocational agriculture in high school is the freshman year. At that time, he is not vocationally stable or sure of his high school experience. It is also difficult for him to participate in work-experience and other meaningful experiences because of his lack of maturity and size.

D. R. Purkey is assistant state supervisor, Ohio State University.

vo-ag

Other vocational programs have found the upper high school class to be most effective. I am sure vocational agriculture has found the same to be true.

6) **Curtail attendance of teachers** to every breed association meeting, breed judging contests, farm machinery field days, and other advertising schemes. Business and industrial concerns that service farmers find it necessary to have an increasing number of meetings and programs to keep farmers interested in their products. Many of these are educational, but 99 per cent of them are advertising, with considerable time and effort spent on them. We should evaluate our sources of information.

7) **Organize an in-service training program** for teachers geared to more effective use of time. This may involve longer sessions which would result in less driving time and more instruction. Every in-service training program must provide the teachers with the latest information by the most expert staff possible. It would be a wise expenditure for vocational agriculture to hire a specialized staff of the highest possible quality who not only understand their own technical field, but understand the agricultural education program.

8) **Provide a "sabbatical leave" program** for teachers in order to allow them to pursue graduate work while not carrying on a full teaching program. We are asking too much of a teacher to expect him to use his "vacation" for "education." If he is to keep up to date professionally, he must be granted a leave, with pay, to pursue graduate work and not try to do both at the same time.

9) **Get "lay help" for many regulatory jobs** whereby teachers of vocational agriculture can organize their

community resources. Every community that has had a history of vocational agriculture will find many graduates who are qualified to do many of the duties that the teacher feels he must perform. There are State Farmers, American Farmers, Adult Farmers, and Young Farmer students who are more than willing to act as lay leaders for many of the activities. Such things as field trips, demonstration teaching aids, laboratory experiments, etc., can be provided with the help of such lay people.

10) **Use panel discussion methods** (or others) in Young and Adult Farmer education programs and expect the participants to help secure the technical information for the class. In one case, it was called to my attention recently that this procedure was followed and the three panelists that conducted the evening program spent several days securing technical information for the adult farmer class. This accomplished two objectives.

First—the farmers who participated in the program secured information which they used in their own farm business; and second—they were able to convince the others in the community that it was good material.

HOW TO USE THE TIME SAVED

1) Quality of instruction needs constant attention. There is no substitute for a well planned lesson. Every day each class should have an objective with a lesson plan developed, including teaching aids, student resource materials and references.

2) On-farm training — Such on-farm teaching must be more thorough and specific. It must result in improved situations mutually agreed upon by the teacher and the students.

★ ★ ★ ★ ★

what's coming up

August 8-11. Vo-Ag Teachers Association of Texas Convention, Austin, Tex.

August 9. Science at Work, open house and special non-technical reports by staff scientists, The Connecticut Experiment Station, Lockwood Farm, Mt. Carmel, Conn.

August 20-23. American Institute of Cooperation, summer session, University of Minnesota, Minneapolis.

September 10-14. National Association County Agricultural Agents annual meeting, Waldorf Astoria Hotel, New York City.

October 29-November 1. National Agricultural Chemicals Association, 28th annual meeting, The Homestead, Hot Springs, Va.

November 2-3. Pacific Northwest Plant Food Association, annual convention, Hotel Gearhart, Gearhart, Oregon.

November 17-23. National Farm-City Week.

November 26-30. National 4-H Club Congress, Chicago.

January 17-19, 1962. Southern Weed Conference, Hotel Patten, Chattanooga, Tenn.

Speak up

(Continued from page 6)

ple as a whole to consider the role of a county agent with a different view. The county agent belongs to all the people.

I would not rule out all economic information as a county agent's responsibility. Farm planning, farm management practices are highly important in helping the farm families to help themselves.

Mass communications are quite helpful in general information. However according to a recent survey 40% of the people depend on Mass Media for information.

The field of public relations and policy is one where all people can not agree. Regardless of how careful a county agent discusses public policies he is bound to get some criticism.

I feel that the county agent and his local committees are best qualified to determine what the people in the county want and need to bring them the returns they desire from their chosen field.

Ezra Taft Benson, at the NACAA Convention in Salt Lake City, in 1954, said in effect: The county agent is to interpret the research to his local people and in addition help people to see how they can use this information on their farms to their advantage.

The county agent has acquired the reputation of being the best source of unbiased information. Subject matter is still one of the important fields of the county agent along with all the others he is expected to know.

The problems and the economic changes vary considerably within the states and within counties to such an extent that it is hard to make a blanket recommendation; therefore, I feel it is the responsibility of local program committees to determine the type of Extension Program for their particular county.

The county agent who maintains good lines of communication with the college specialist always has the latest technical information. A county agent has good public relations if he does his job well and lets people know what he is doing.

J. B. TURNER

Farm Adviser

Vandalia, Illinois

Most of your points are very good, "J. B." but studies will challenge your statement concerning the county agent being the best source of unbiased information.—EDITOR.

**"I designed and built this
horse barn with WEST
COAST LUMBER for less
than \$1.00 a square foot"**

**says HAROLD LUCAS,
ADAIR PONY FARM,
ALBANY, OREGON**



The lower grades of West Coast Lumber 2x4's are face laminated to form the floor of the hay storage area in the Lucas barn. The best edge of each piece was turned up.



Horse Breeder Lucas and
Mr. White, registered "Pony
of the Americas" stallion

"I checked costs of other materials and selected the lowest grades of West Coast Lumber because the difference in price made it possible to build a larger barn for my money. I also prefer lumber because I could design and build the barn myself.

"The barn is 32' x 50' which gives me space for five 10' x 10' box stalls, storage space for 15 tons of hay, an 8' alley, 8' x 8' tack room and a 6' overhang on the loafing area. I used low grade 2x4's to laminate the floor of the hay storage. The barn is a pole type and 8' lengths of 2' x 6' made it easy to span the openings and fasten direct to the poles.

"Another reason why I used West Coast Lumber is that wood is good for horses. Other materials are noisy during bad weather and this disturbs thoroughbred animals," Lucas concluded.

Here is another example of the practical use of the lower grades of West Coast Lumber to meet a specific building purpose economically. Ask any lumber dealer about the economies of the lower grades of lumber... he'll be happy to help you.

WEST COAST LUMBER

West Coast Douglas Fir • West Coast Hemlock • Western Red Cedar
Sitka Spruce • White Fir

For farm building information, write:

West Coast Lumbermen's Association, 1410 S. W. Morrison Street,
Portland 5, Oregon

Try a Tractor Workshop!

*Group discussion and a
conveniently-planned schedule,
coupled with supervised practice,
make this a successful class.*

By ROBERT DENKER

TEACHING ADULT FARMERS how to maintain, repair, and adjust farm tractors presents several problems. It is important to provide both classroom instruction and supervised practice and yet not tie up the shop or tractors for several weeks.

We tried a new type class on tractors this year that at least partially solved these problems. Enrollment was limited to 12 because of the facilities and need for individual instruction.

A meeting had been held previously with four local machinery dealers to determine what should be taught to accomplish the objectives. A guide prepared for use in workshops training vocational agriculture teachers on tractors was used as a discussion guide with the dealers.

Surprisingly, these dealers suggested additional skills that should be included and actively supported the class. They thought farmers with this knowledge would obtain better results with their tractors and be better satisfied customers.

The machinery dealers agreed to take turns attending the classes and serving as resource persons. One dealer agreed to bring a dynamometer to demonstrate increased efficiency.

(Continued to page 20)

Robert Denker is vo-ag instructor at California, Missouri.



All the enrollees knew how to perform daily service on the air cleaner, but few realized its importance. With the use of a dynamometer, improved efficiency from such skills as complete servicing of the air cleaner were shown. Tractors brought in by the farmers enrolled increased four horsepower and saved about 10 per cent on fuel.



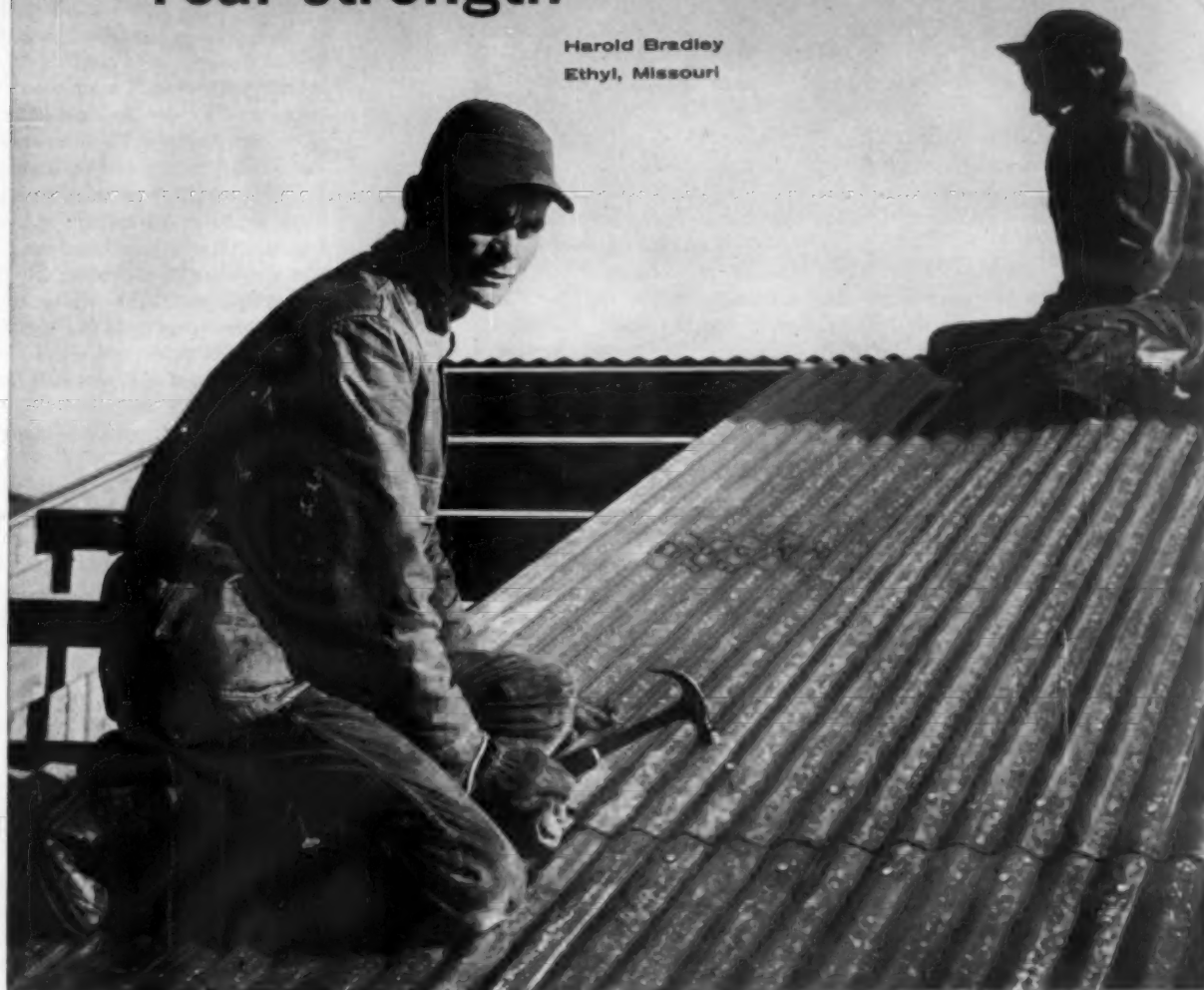
Cleaning, repair, and adjustment of carburetors was part of the workshop. After receiving instruction in the classroom with visual aids and demonstrations, the farmers worked two days in the shop. Emphasis was placed on the skills that would give more power and lower their costs.

COUNTY AGENT AND VO-AG TEACHER

A GRASS-ROOTS STRONGBARN STORY FROM MISSOURI

"That extra lick it takes to nail Strongbarn means you're getting real strength"

Harold Bradley
Ethyl, Missouri



"And I want that extra strength for my shed. I want this building to last," Harold reported.

"Strongbarn's a little harder to bend around corners, too... but again, that's because it's extra strong. It sure lives up to its name. If you happen to miss the nail while you're hammering, you don't knock a hole in that sheet like you might expect.

"And those Strongbarn sheets handled real good. I was surprised. Even in the wind we could handle them... wasn't dangerous at all.

"This building's a pretty good size, 42' x 60', and I intend to use it as an all-purpose barn. I plan to put in some stanchions and milk a few cows, have a storage

place for my hay, a few corn cribs, shelter for some of my machinery, and a stall for my horse. Folks kid me about my horse, but she's a fine animal and I like her.

"A lot of neighbors dropped by to see the barn and they all thought it was great. My cousin paid a visit and he really liked it. Said he was going to build one just like it," Harold stated.

STRONGBARN

...twice as strong as ordinary corrugated steel roofing and siding of same gage and equal the strength of more expensive, heavier gage steel roofing and siding.



manufactured by GRANITE CITY STEEL CO., Granite City, Ill.

ag leaders audio-visuals



news and views by George F. Johnson

IS SPECIAL IN-SERVICE TRAINING of ag leaders, educators, and subject specialists necessary to gain maximum effectiveness in use of visuals in communication?

Many documents have been written on this question. Much research has been done. But what do ag leaders and educators themselves think about it now?

One of the eastern ag colleges recently arranged a two-day session with over 70 subject matter extension specialists, all experienced in adult and 4-H education. The goal of the session was not to train, but to make all specialists aware of the need for better audio-visual teaching and to provide an opportunity for self-analysis. Good and poor presentations of the same topics by the same individuals were used as demonstrations of what careful planning of visuals can do in contrast to careless planning.

Assignments were made to groups of these specialists to see what they could do on short notice with planning visual aids with both abstract and realistic subject matter. And finally, the effective and the ineffective use of all major types of projection equipment were demonstrated by experienced personnel.

What did the self-evaluation sheets reveal after almost two days of exposure to, and participation in, these visual operations? The answer is: Ag educators (at least in the extension field) want most of all, training in how to plan an effective visual presentation and then further training in exactly how to make the presentation effectively. They also want training in how to evaluate pictures and how to prepare effective slide sequences. A dozen other practical items were also in the "wanted" list.

A study of these visual training needs as listed by the educators themselves certainly should open the eyes of audio visual specialists and administrators generally to the pressing need for more down-to-earth in-service staff training.

Theory? Yes. We must know some of the principles of how we think visually and how the mind functions on visual impulses. Then, drop the theory long enough to face the fact that many ag leaders and educators are in great need of knowing the simplest facts about overhead projection, flannelgraph presentation, and camera operation (just to mention a few of the needs).

In a group of 70 or more serious-minded extension specialists, 44 checked as a need: "How to letter simple signs and charts;" 40 wanted to know "how to prepare visuals for overhead projection;" and 34 indicated a desire to know more about "how to prepare TV visuals." From this survey, we gain several facts: 1) How simple and specific the training needs are; 2) That somewhere along their training route, many of our present-day extension specialists and probably many other ag leaders, missed basic training in audio-visual communication; 3) That training in planning, making, and presenting visuals is a continuing responsibility of visual specialists, and 4) That a substantial portion of the responsibility for keeping visually up-to-date and professionally improved rest with the individual himself.



Extension subject matter specialists list more training in planning visuals and making illustrated talks as a top need in their professional improvement.

What's New

"Color Fun" is the title of a new, well-illustrated 50-page booklet on how to make better color slides with **Ansochrome film**. It is published by Ansco and available at most stores selling color film at 50 cents per copy.

An **8" x 36" aluminum shelf** on which to stack flannel-board visuals is now being supplied by Oravision Company with its folding flannel-board. The shelf costing \$8.75 will fit all such boards when used in combination with the Oravision easel.

"**Instant Lettering**," a simple dry transfer method for professional lettering for charts, displays, TV flip cards, etc., was recently announced by Arthur Brown & Co., Inc., 2 West 46th Street, New York 36, N. Y. Advantages of this most ingenious method are listed as: 1) It leaves no trace of adhesive, 2) It needs no equipment, 3) It works on any smooth surface—paper, glass, metal, etc., and 4) It is quick and simple to use. A standard sheet of letters sells for \$1.50, a sheet of large letters for \$2.00. Letters come in five colors—black, white, red, yellow and blue.

A new **16" table** has been designed to permit use of overhead projector at normal desk top level. The teacher can remain comfortably seated and all work is done at desk level. The table is on large 4" ball bearing casters so that the entire equipment can be easily moved about. The cost for the table is \$29.95. The source is H. Wiison Corporation, 546 West 119th Street, Chicago 28, Ill.

★ ★ ★ ★ ★

GETTING IN ORBIT

The close harmony and teamwork of county extension personnel in Missouri is due to a great extent to their excellent workshops. This year the County Agents Association, County Home Agents Association, and Epsilon Sigma Phi met on the Lake of the Ozarks for their sixth annual get-together.

About 120 agents, including assistant and associate agents assigned to 4-H, balanced farming, and area development activities, attended the two-day meeting. This was nearly 100% participation.

"Getting in Orbit" was the timely theme for 1961. Hensley Hall, Missouri County Agents Association president, gave credit to the workshops for helping to develop the close co-ordination of all of the personnel at the county level in carrying out extension's responsibility of assisting local people to develop and follow through on their county programs.

COUNTY AGENT AND VO-AG TEACHER

SULPHUR
and its
derivatives
benefit
agriculture

SULPHUR IN PLANTS AND SOILS



Texas Gulf Sulphur Company

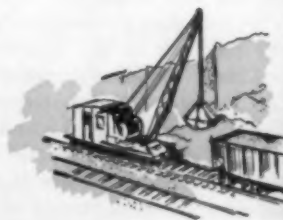
SOILS DO NEED SULPHUR!

A re-examination of mineral requirements in crop-soils is very much in order.

In the wide and successful search for providing better soil foods based on the important triumvirate 0-0-0, there appears to be somewhat of a let down in studies of other soil minerals—the need for sulphur, for example. Tests indicate that there is a danger—even actual existence—of a sulphur deficiency in soils where certain crops requiring sulphur are grown.

To aid in this re-examination of sulphur values, we have prepared a 28 page booklet titled "Sulphur in Plants and Soils" which is edited by a well known authority on this subject. Write for copies not only for yourself but for others you feel would be interested.

This brochure is Section V of our extensive Sulphur Manual discussing many phases of Sulphur. Section VI — Sulphur in Plant Diseases — will be available shortly.



TEXAS GULF SULPHUR COMPANY

75 East 45th Street, New York 17, N. Y.
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*Sulphur Producing Units: Newgulf, Texas • Moss Bluff, Texas • Fannett, Texas
• Spindletop, Texas • Worland, Wyoming • Okotoks, Alberta, Canada.*

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your own
film
library...



TAKE YOUR PICK OF THESE VALUABLE FILM STRIPS!

FREE with Albers Quality Control Circles from Suckle, Calf Manna, Sho-Glo or Spur bags You receive...

- * 15-MINUTE COLOR FILM STRIP WITH RECORD
- * 25 COPIES OF MATCHING 36-PAGE TEXTBOOK

Add new interest to your beef, dairy and sheep meetings with these Albers film strip sets. Every phase of selecting, fitting, and showing livestock to the winner's circle is covered in detail. You'll show them to beginner and old pro alike!

The beef set is a good example. Produced with the assistance of a professor of Animal Husbandry at a leading state college, it features the personal experiences of more than 100 breeders, feeders and herdsman - representing all major breeds in every cattle-producing area. This full-color film strip, 15 minutes in length, comes complete with dialogue

record. And to supplement your presentation, you'll also receive 25 copies of the new fact-filled 36-page Albers "Selecting, Fitting and Showing Beef" textbook.

Each set-film strip, record and 25 books - is yours free. Send for as many as you like. For each of the first 2, simply enclose 40 Albers Quality Control Circles from Suckle, Calf Manna, Sho-Glo or Spur bags. Or get all 3 for only 100 circles.

You'll find many heads-up livestock men in your area relying on these Albers feeds for top results. See them - start collecting your circles now. You'll have your own film library before you know it!

Look for this Quality Control Circle - and mail your coupon soon!



ALBERS MILLING COMPANY, Dept. CA-81
1016 Central Street, Kansas City 5, Missouri

Please send the FREE "Selecting, Fitting and Showing" film strip set(s) checked below. I enclose 40 Albers Quality Control Circles for each of the first two, 100 for the complete series.

- ☐ "Selecting, Fitting and Showing Beef"
- ☐ "Selecting, Fitting and Showing Sheep"
- ☐ "Selecting, Fitting and Showing Dairy Cattle"

Name _____

Street _____

Town _____

State _____

TRACTOR WORKSHOP . . .

(Continued from page 16)

The classroom time consisted of three night sessions of two hours each set up as follows: 1) Principles of engines; Care, adjustment, and repair of air cleaners and carburetors; 2) Care, adjustment, and repair of ignition systems, cooling systems, wheel bearings, clutch, and brakes; 3) Selection of oils, fuels, and greases, and comparison of diesel versus gas tractors.

Visual aids as cut-a-way carburetors, air cleaners, etc., along with charts and graphs on an opaque projector were used each night. The instructor led the discussion and made the demonstrations. The resource person was called on to stress the importance of the skills and add from his experiences.

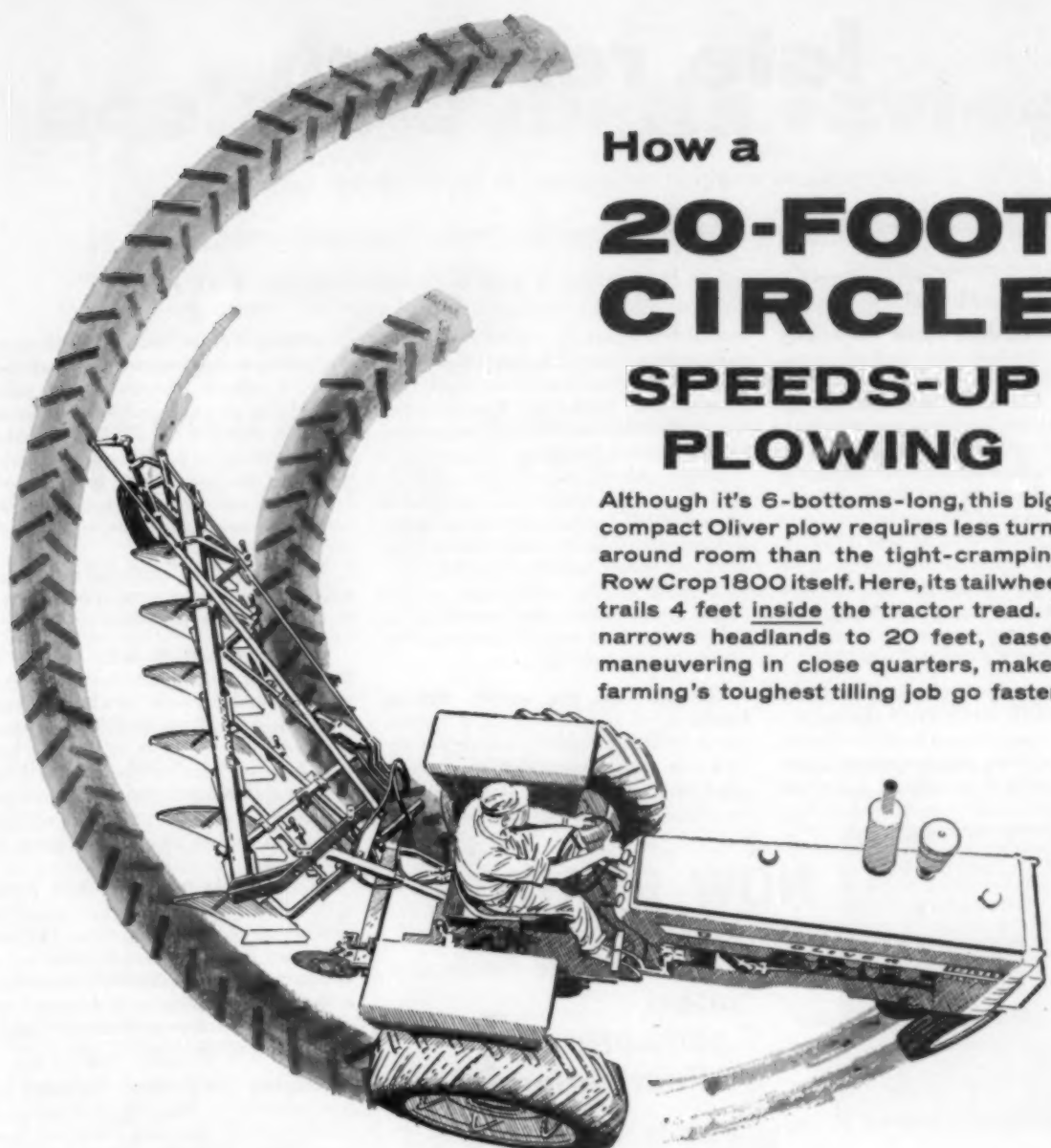
THE "WHY" IS IMPORTANT

An interesting experience on importance of complete understanding involved comments from the class on servicing air cleaners. Most said they knew the air cleaner was to be serviced frequently, but neglected the job because they didn't understand the importance of it. Also, only about three of the class members had been packing front wheel bearings correctly. It was obvious that thorough instruction of the "why" as well as the "how" should precede going to work in the shop. Discussion, which included experiences of the class members, was important in obtaining understanding.

Two eight-hour days during the Christmas vacation were scheduled for the periods in shop. Six members of the class brought in their tractors and two members were assigned to each tractor. The tractors were checked for horsepower and efficiency on the dynamometer before starting to work on them. A list of the jobs to be performed was given to each member. Since skills being practiced had been demonstrated previously, the instructor worked with individual groups and checked the work. It was necessary to call the whole group together a few times each day to review a skill or call attention to an example of incorrect care or adjustment. Members seemingly enjoyed these sessions and joked with each other about the poor jobs they had been doing.

After the jobs were finished, the tractors were put back on the dynamometer and re-checked. They had increased in power an average of four horsepower and efficiency was increased about 10 per cent. Use of the dynamometer was thought to be valuable because it provided an accurate measurement of the improvements on a tractor. ☆

COUNTY AGENT AND VO-AC TEACHER



How a **20-FOOT CIRCLE SPEEDS-UP PLOWING**

Although it's 6-bottoms-long, this big, compact Oliver plow requires less turn-around room than the tight-cramping Row Crop 1800 itself. Here, its tailwheel trails 4 feet inside the tractor tread. It narrows headlands to 20 feet, eases maneuvering in close quarters, makes farming's toughest tilling job go faster.

"Plowmakers for the World" at South Bend, Indiana, found a simple way to steer this new semi-mounted No. 5540 around corners. A pivoting hitch—pulling the plow from a single post at front center to relieve side draft—also controls the tailwheel, swings it into any turn the tractor makes.

Innovations by Oliver reach farther than 100 years into plow history—back to the first chilled moldboard and to the sensational Raydex® plow-share that ended resharpening by village blacksmiths.

The Oliver organization and its franchised

representatives throughout the world are dedicated to making every step in agriculture more efficient and rewarding—from plowing to harvest. For information on up-to-date applications of power and machines in farming, see the Oliver dealer in your community. Also, seek his aid—when equipment and shop facilities are needed for educational projects. Oliver Corporation, Chicago 6, Illinois.

OLIVER



late research

- Growing potatoes on top of the soil may be key to efficient harvesting
- A farmer in England has found a way to "mother" orphaned lambs
- "Do-it-yourself" weather forecasting is goal of research in New York state

Chemicals that occur naturally in some corn plants and ward off insects may find their way into commercial insecticides. University of Wisconsin entomologists are studying the chemicals which give natural resistance to corn borers for clues about their ability to kill or repel insects and fungi. Stanley Beck and Edward Smisson have synthetically produced more than 50 variations of one of the natural chemical resistance factors found in corn. The new synthetic variations act differently on insects and fungi—some are even more powerful than the original material.

Use of polyethylene box liners combined with refrigerated storage can extend the marketing season for Golden Delicious apples, and may allow a premium price for the producer, according

to a USDA report. In a seven year study with apples from Virginia, West Virginia, Pennsylvania and Maryland, the Agricultural Marketing Service compared effectiveness of sealed, non-sealed and perforated box liners.

Sealed polyethylene liners maintained fruit quality better than non-sealed or perforated liners in the experiments. But non-sealed liners with overlap folds are more widely used because they provide most of the advantages of the sealed liners without the hazards of insufficient gas exchange in liners with inadequate permeability.

There'll be no more aching backs from potato digging if experiments in Britain are successful. For the past two years, feasibility of growing potatoes on the surface of the soil has

been tested by the National Institute of Agricultural Engineering in Bedfordshire, England. Success would solve one of the greatest problems in farming, they report—the efficient mechanical harvesting of potatoes, for with virtually no soil to separate from the potatoes the entirely mechanized lifting of a clean and undamaged crop would be possible.

The trials have explored use of an artificial cover of opaque material such as black polyethylene film.

A device which will secure a mother for an orphaned lamb has been designed and marketed by a farmer from Yorkshire, England. It is an adoption crate which holds a ewe in a central pen with her own lamb on one side, and the orphan on the other. Since the ewe cannot turn to smell the strange lamb, she accepts it as her own within three or four days.

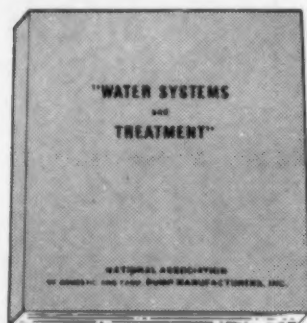
The crate is made of sheet metal with a metal roof. It can be assembled or dismantled in a few minutes. The ewe generates her own warmth, which can be controlled by fitted ventilators, while a feeding compartment in front of her pulls out like a drawer from the outside for filling with food and water.

Helping the farmer forecast his own weather is the goal of a research effort by Profs. Bernard Dethier of New York State College of Agriculture at Ithaca and Nelson Shaulis of New York State agricultural experiment station at Geneva. The researchers have set up more than 20 stations in central New York to study the effects of hills and lakes on weather. The men will study temperatures and rainfall near two of the Finger Lakes.

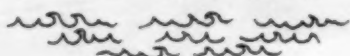
Dethier says he hopes the findings will give farmers a key to weather predictions of their own.

Farmers will someday harvest trees mechanically much as they now combine wheat and pick corn. "Mechanical tree harvesting is now in the laboratory stage," say Lee James and Lester Bell, Michigan State University foresters. "It should bring great savings in money and backbreaking hand labor. And it's but one of several forestry revolutions now underway."

COUNTY AGENT AND VO-AG TEACHER



NOW READY



latest
authentic
Information !

"WATER SYSTEMS and TREATMENT"

170-PAGE
HANDBOOK

plus 6 news letters \$2.00

SET INSTRUCTOR'S CHARTS \$7.50
(14 illustrations)

HANDBOOK IN QUANTITIES \$1.50 ea.
for classrooms

The Association will assist in conducting 2-day
Water Treatment CLINICS.

The supply of above literature is limited—ORDER NOW!

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OF DOMESTIC AND FARM
PUMP MANUFACTURERS, INC.**
20 WEST STREET, ANNAPOLIS, MD.

booklet-bulletin reviews

Publications listed on this page may be obtained free of charge by sending a post card request to the company or manufacturer named. Be sure to say you saw it in County Agent & Vo-Ag Teacher.

Audio-Visual Aids

FREE FILMS

Prompt delivery of free film is assured through Sterling Movies' coast-to-coast network of film libraries. You can check one of three plans—weekly, every other week, or monthly. You pay only to return the films. There are several series to choose from, on a variety of subjects. Write to Sterling Movies U. S. A. Inc., Central Booking Exchange, 100 West Monroe St., Chicago 3, Ill., for literature.

Chemicals

PHOSDRIN INSECTICIDE

Technical information on the new phosphate insecticide, Phosdrin, is being offered by Shell Chemical Company. The company has prepared a handy wall chart as a grower's guide and a safety chart. Crop leaflets, as well as an information bulletin, are also available. For your copies, write Shell Chemical Company, Agricultural Chemicals Div., Dept. 4367, 50 W. 50 St., New York 20, N. Y.

MITE CONTROL

A brochure concerning properties of Tedi-on® miticide has been published by Niagara. When used early, Tedi-on protects deciduous fruits all season long. It is efficient, selective, safe, compatible, and long-lasting. Time and rate of application are given for both eastern and western areas. For a copy of *Five Reasons*, write to Department A, Niagara Chemical Division, Food Machinery and Chemical Corporation, Middleport, N. Y.

SEVIN INSECTICIDE

Chemists call Sevin a carbamate. It is safer than many other insecticides, less hazardous to field workers. No special protective clothing is necessary. In the field, orchard, vineyard, or on shade trees, Sevin performs effectively and can increase crop yields. To get your free literature series on Sevin insecticide, write to CRAG Agricultural Chemicals, Advertising Department, Distribution Section, 30-20 Thomson Ave., Long Island City 1, N. Y.

SEED TREATMENT

You can help increase farm income in your county by telling farmers about the benefits of seed treatment. Morton Chemical Company, makers of Panogen seed fungicide, Dri-nox seed insecticide, and Pandrinex dual-purpose treatment will be glad to provide booklets, films, and other helpful materials. For full information on materials available on the seed treatment story, write Morton Chemical Company, 110 N. Wacker Dr., Chicago 6, Ill.

Structures

ROOFING & SIDING

Your farmers will have year after year of rust-free service—with little or no upkeep problems—if they use galvanized steel roofing and siding on their buildings. American Zinc Institute, 324 Ferry St., Dept. CA-8, Lafayette, Ind., will be glad to send a free instruction manual covering uses for their zinc-coated "Seal of Quality" sheets. Just send them a card.

Tractors & Equipment

NEW COTTON PICKER

A two-row cotton picker has been added to the line of farm equipment at Allis-Chalmers. The picker can be used to harvest cotton, and then can be converted to a field tractor for the rest of the year. If you would like more information on this equipment, write to Allis-Chalmers Farm Equipment Division, Milwaukee 1, Wis., for Catalog No. TL-2389.

EQUIPMENT REPLACEMENT

Old machinery can cost money. By replacing old equipment, work can get done faster, better, there is less maintenance, and profits increase. Caterpillar Tractor Co. has published an 8-page booklet on this subject entitled *It's a Matter of Record . . . It Pays to Replace Older Equipment*. The booklet documents changes from previous model tractors to the improved, present-day models. For your copy, write Caterpillar Tractor Company, Advertising Division, Peoria, Ill. Ask for Booklet D110.

Livestock & Poultry

PIPELINE MILKING

A 24-page brochure offered by DeVal Separator Company provides a practical guide to the planning of a pipeline milking system. Planning a system involves the size of the herd, available labor supply, financial resources, the farmer's personal preferences, and the housing system desired. Information is given on the merits and limits of three types of housing used in pipeline milking, loose housing vs stanchion barn housing, and four types of parlors. A copy of the brochure may be obtained by writing to DeVal Separator Company, Poughkeepsie, N. Y.

LOW MOISTURE SILAGE

Production and profits can be increased by using better feeding methods to produce more milk or beef per acre. This can be accom-

Get acquainted with the New Products

on page 24

- Protective Masks
- Aeration System
- Transparent Hen
- Portable Engine Generator

plished by feeding cattle low-moisture silage instead of hay. Many questions about making low-moisture silage in conventional silos are answered in a new 16-page booklet, *Low Moisture Grass Silage*. Information in the booklet has been gathered from various USDA and state university reports. For your copy write to Badger Northland, Inc., Kaukauna, Wis.

BRAHMAN CATTLE

Brahman cattle—their characteristics, origin, milk production, distribution, as well as their cross-breeding value—are the subject of a new handbook. Included is a chart for the standard. The adaptability of Brahmans to cold and hot temperatures and why they make a desirable investment for the breeder are discussed. *The American Brahman Handbook* is available from American Brahman Breeders Association, 4815 Gulf Freeway, Houston 23, Tex.

YORKSHIRE JOURNAL

American Yorkshire Club would like to acquaint you with the merits of their breed of swine. They will be happy to send literature and a free copy of *Yorkshire Journal* if you write to them at 1001 South St., Lafayette, Ind.

Miscellaneous

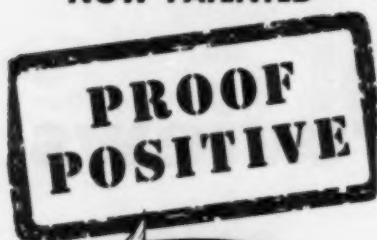
PLASTIC GREENHOUSES

The low initial cost is just one of the many reasons why the use of polyethylene plastic for greenhouses has grown so rapidly. Pointers in the use of the plastic covering, the heating and ventilating requirements, and a table of plastic greenhouse construction hints are all in the bulletin *Ger-Pak Polyethylene News No. 2*. A copy will be sent to you if you write Gering Plastics, Agricultural Department, Kenilworth, N. J.

VISQUEEN FILM

The versatile Visqueen film can be used in the garden to protect the roots of bushes, shrubs and trees, to cover cold frames, to protect tools and equipment; the list is endless. Write for the new folder, *100 Easy-Do Uses for Visqueen Film Around Your Home, Garden and Garage* available from Special Products, Visking Company, Division of Union Carbide Corporation, Chicago 38, Ill.

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cotton filters has been introduced. The refills, packaged in a new self-dispensing container, can be quickly removed, one-at-a-time.

Because Filtair protective masks weigh only one-half ounce and are so pliable they fit the contour of any shape face, there is a maximum of comfort to the wearer.

For further information, request Bulletin No. 48ANR from General Scientific Equipment Co., P. O. Box 3038, Philadelphia 50, Pa.

AERATION SYSTEM

Out in the Middle West, I saw several grain storages which have incorporated a new and exciting method of



maintaining grain and corn in top condition. They are using Douglas Aerators which work very simply.

The unit employs 115 volt power and can be placed either at the bottom of the bin or perpendicularly. When mounted horizontally, the air flows from the top of the bin to the perforated intake of the Aerator.

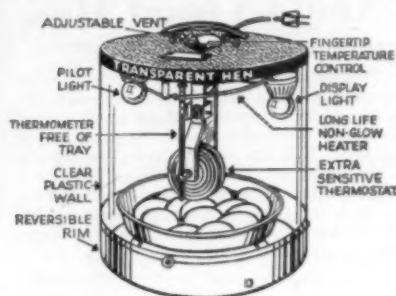
The new system prevents moisture migration, condensation, hot spots, crusting, and absolutely stops mold growth and insect activity.

You will want to know more about this new development. All that is necessary is that you write Douglas Chemical Company, 620 E. 16th Ave., North Kansas City, Mo.

TRANSPARENT HEN

The "Transparent Hen," developed especially for classrooms, science fairs, hatchery showrooms, etc., has clear plastic sides, giving spectators complete visibility of the hatchery process. This new incubator can be used as a brooder for a few chicks, for bacteria culture, or for seed sprouting experiments.

The incubator measures 11¼ inches in diameter and 12 inches high, with a capacity of more than 20 hen eggs. Temperature, humidity, and air change can be adjusted effectively and quickly.

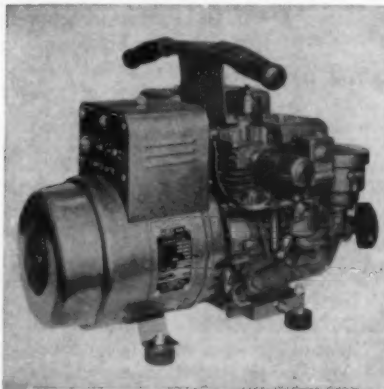


erate. Readers can obtain further information on this new incubator by writing E. B. Hill, Lyon Rural Electric Company, 2073-5 Moore St., San Diego 12, Calif.

PORTABLE ENGINE GENERATOR

To provide power for portable electric tools as well as for campers, cabins, and trailers, and for many other uses, the Winco Super Mite is especially recommended. A new, lightweight, portable engine generator, the Super Mite, with its many exclusive features for dependable, economical portable electric power, saves up to 60% in fuel cost.

The generator provides 1500 watts of



intermittent AC power. The unit complete with carrying handle weighs only 82 pounds.

Write to Wincharger Corporation, Sioux City 2, Iowa, for complete information and prices.

COUNTY AGENT AND VO-AG TEACHER

county agents, usa

By VIC CAROTHERS

AN EFFECTIVE PUBLIC RELATIONS PROGRAM

In Garrett County, Maryland, nothing is left to chance by James A. McHenry, county agent, in his effort to improve agriculture and inform non-farmers of the true farm situation.

McHenry has extended his efforts to present programs about consumer prices, farming trends, and the "why's" of farm surpluses to as many service and civic clubs as possible. Practically all major service clubs in the county now hold a Rural-Urban Night once a year.

McHenry uses a multiple-pronged approach to tell the farmer's story to these groups and farm organizations—a hard hitting technique of speeches backed up with publications. These bulletins contain facts and graphics to show why Americans pay less of their total income for food and are the best fed nation in the world, while the farmer gets a smaller and smaller share of the cost of the consumer's market basket.

After a successful pilot start last year, McHenry has gone to a speaker's bureau operation, scheduling specialists from the University of Maryland College of Agriculture to present a comprehensive picture of a particular phase of the agricultural story. Both businessmen and farmers praise his efforts.

Once a year, the Farming for Better Living Council sponsors a banquet to honor farm families in the program. Top honors go to the Farm Family of the Year, with prizes of merchandise for all the farm families enrolled in this program. Local merchants provide the prizes. On this Council are 21 business men and the Farm Couples of the year, for the past 3 years.

Each businessman on the Council is assigned five or six farm families which he visits on the farm once or twice a year, to gain a better understanding of what farming is currently like.

For these groups and other organizations, McHenry uses a unique slide talk with 120 to 140 slides showing how and why all the farm families in the Farming for Better Living Program operate their farms.

No one in the county escapes McHenry's salesmanship. He uses a series of from five to ten newspaper stories each spring, featuring a farm family carrying out a phase of farm life.

Credit is due, too, to the county's Rural Development and other programs for improving the county's gradually increasing income from a more efficient farm production. In the case of dairying—the county's major farming enterprise—the gross income from sales of milk and cream has increased by over

\$1,042,000 even though the number of cows decreased by 200 head since 1954.

Over-all results of these efforts prove their worth: Businessmen are thinking more about agriculture. A local bank plans to add a farm credit manager—the first in the county. A county seat milk processor reports a tremendously increased volume of business. Farm buildings are painted and spruced up. Farmers are using more mechanical and labor saving equipment.

Thanks to McHenry and his energetic co-workers, Garrett County farmers have more coins to toss, and city folks are aware of their debt to agriculture.

FOR YOUR CONVENIENCE

COUNTY AGENT & VO-AG TEACHER is now being published by AMERICAN FRUIT GROWER PUBLISHING COMPANY, Willoughby, Ohio. For prompt response, please address your correspondence, change of address or matters pertaining to your subscription to—

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When you keep your slides in this Multiplex cabinet, you gain these three advantages:

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slides properly stored—cylinder-type key lock on door.

The Multiplex Cabinet shown above holds 2340 slides, 2" x 2" . . . or 780 slides, 4" x 3 1/4" . . . or some of each. Door opens down to provide shelf. Spacious utility drawer in base. Smaller and larger sizes, and other models, are available. For more complete information, use the coupon below.

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PHOTO SLIDE FILING SYSTEM

in summing up

You and the specialist!

WE HAVE A FULL BLOWN CONTROVERSY on our hands! What are we going to do with it? Well, it's a little like handling the proverbial hot potato.

Free discussion is a wonderful thing, until it gets out of hand. We don't aim to let that happen with this "wrangle" over the "Academic Trap" subject (see May "in summing up"). We think we started something *worthwhile* and we intend to make the most of it.

We've talked to county agents who tell us that there do not seem to be *any* answers to Extension problems anymore, but a subject like this one gives them their BIG OPPORTUNITY to sound off on their own pet grievances.

Example: what about this practice of the extension specialist, in many cases, by-passing the county agent? The agent has to "read about it in the farm magazine." Specialist "So-and-So" said "such and such" in the "Prairie Homestead." And the agent finds out about the new development from his farmers!

Isn't it to the extension specialist's advantage to fill in the county agent on what's going on—especially when it's something that affects his own county?

I'm 100% for the idea of a specialist sending county agents and vo-ag teachers memos on everything he plans to discuss in farm magazines and over the radio and TV.

When it's a hot subject that shouldn't be delayed, the specialist could send the ag leader a copy of what is to be published—with the understanding, of course, that the publication requesting it has first rights to the material and the county agent should hold up publication of the material until after the magazine publishes it.

Wide-awake county agents and vo-ag teachers are not uninformed of the workings of a free press. I think you understand that magazines such as this one thrive by gaining every competitive advantage possible.

We know that what we're advocating *could* possibly bring curtailment—even worse, censorship—of much worthwhile material. The important thing for county agents and other ag leaders to realize, though, is that it could work *both ways*. Many county agents are prolific writers in farm publications, too. This ought to be encouraged. It's the best way we know of for ag leaders to keep on top of their local situations.

Imagine curtailing the writings of one Philip E. Crystal, the sage of Curry County, New Mexico! We carried some of this witty agent's material in our May issue and few articles have made a bigger hit.

We all can benefit from a quip appearing in "Crystal Clear":

"Be sure brain is engaged before putting mouth in gear."

The purpose of exposing the practice of by-passing the county agent or any other responsible leader in the farm community is simple:

If the county agent is not informed, he will be by-passed by the farmer. Then look out, Mr. Extension Specialist. Your days will be numbered, too. It's in the best interest of Extension that the *local leader* be the captain of his own *local situation*. If there's a new crop variety that looks promising for his area, he shouldn't have to read about it in *Farm Journal*. He should be ready to answer farmers' questions on it when they read about it in the national or state publication.

It could be argued that the agent or teacher should *keep himself informed* by constant contact with the college. Well, that sounds fine on the surface, but then we run smack dab into the situation brought out in the recent subject on this page:

Pre-occupation with too much non-agricultural work! In-service training in everything but subject matter! All right, I'll say it again—caught in the academic trap. And it's not your fault. You're being pushed into it in many cases.

Taking a few more appropriate lines from the ole philosopher, Philip Crystal . . .

"... It is important that you learn the trade, before you learn the tricks of the trade."

A friend of mine whose business it is to train future executives in the banking business has a practical answer for those who constantly come up with the cliché: "Book learning isn't everything." His answer:

"True, but it sure is something."

Then he adds, "Neither are visual aids. Such aids are supposed to be, and often are, aids to learning. But isn't it often true that they are also props for the lazy?"

Everything can be overdone—including technical training. If we appeared to go overboard for "subject matter" in the May editorial, it was only because we felt that extension administrators were going overboard for the academic approach.

Like "book learning," being skilled in communications *sure is something!* So is sociology, economics, farm business management and all the other subjects. But let's keep them all in their proper perspective.



Editor

COUNTY AGENT AND VO-AG TEACHER

HIS PORTABLE HOG CRATE MAKES PICK-UPS EASY!



This one-man portable hog crate "invention" saves time and labor for Mr. George Hill, who farms 180 acres near Manly, Iowa. It enables him to round up and cage stray hogs, including litters, in the field. They are then hauled quickly to the road, where the tractor's hydraulic control easily lifts the crate to a waiting truck.

After five years of using Texaco Products to lubricate and fuel his tractors and other farm equipment, Mr. Hill is convinced they are best for economical operation and longer machinery life. He prefers Advanced Custom-Made Havoline Motor Oil, for example, because it wear-proofs engines and cleans as it lubricates. He also uses Texaco Marfak lubricant, because it sticks to open bearings better. Like farmers all over the country, this progressive farmer has found that it pays to farm with Texaco Products.

SHOWN IN PHOTO (left to right) are Mr. Hill and Texaco Consignee M. L. "John" Benn, of Mason City, Iowa, who provides neighborly, on-time deliveries to his customers.



IT'S TEXACO FOR HIM!

Mr. Bruce O. Nicholes, who grows 150 carloads of potatoes annually on his 500-acre farm near Madras, Oregon, likes the lively power of Fire Chief gasoline for his 5 tractors. Fire Chief is Climate-Controlled, specially blended to match year-'round temperature changes. As a result, engines run more efficiently with this great gasoline, saving farmers money on fuel. Photo shows Mr. Nicholes

(with dog) passing the time of day with Texaco Consignee J. Newell Dana, of Madras, Oregon.



BUY THE BEST..BUY TEXACO

TUNE IN TO THE HUNTLEY-BRINKLEY REPORT, MONDAY THROUGH FRIDAY, NBC-TV

PURINA SALUTES

... A "FARMER OF TOMORROW"



George Butler won the Grand Championship at the Wake County Fat Stock Show last year with "Spot," the Hereford he has in this photograph.



"There's a good future in cattle"

—says *GEORGE BUTLER*, of *Garner, North Carolina*

When George Butler completes his education, he will be a veterinarian ... and a cattleman. He plans to raise cattle in addition to his work as a professional man, because he sees a good future in beef production.

Through his youth club activities and his school work, George has gained valuable experience both in livestock production and leadership. His livestock projects have brought him twenty-seven ribbons, including a Grand Championship. He has been president of the county council of his youth organization and has held several local offices.

George, an Eagle Scout with gold and bronze palms, has earned his God and Country Award. He is active both in church and school. In Garner High School, where he is a junior, he belongs to the Beta Club

in which he must have an average of 90 or better to retain membership.

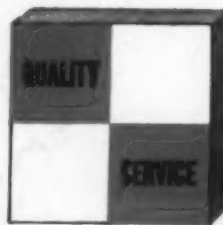
Purina salutes George Butler on his accomplishments and on his well-made plans for the future.

* * * *



GLENN T. WEBB, manager of Waco Feed Company, Purina Dealership in Raleigh and Wake Forest, is proud of having George Butler as a customer. You,

too, have a Purina Dealer near you. He is ready to give you superb service and to advise on feeding and management problems.



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